

**REMARKS**

The Office Action of June 1, 2004 has been received and reviewed. Claims 5, 7, 10, 14-22, 25 and 27-31 are pending in the application. Claims 5, 7, 10, 14-22, 25 and 27-31 stand rejected. Applicants have amended claims 5, 7, 10, 20, 25, and 29-31. Amendments are made without prejudice or disclaimer. Reconsideration is respectfully requested.

**Interview**

Applicants thank the Examiner for the courtesy extended during the interview conducted on September 8, 2004. Applicants appreciate the Examiner's helpful comments. The amendments to the independent claims presented herein contain no new material and, as discussed at the interview, should raise no new issues. Applicants originally claimed the full length genomic sequence of Porcine Reproductive and Respiratory Syndrome Virus, which would have included SEQ ID NO: 18 as disclosed in the Specification at pages at pages 16-17, and 22-23. The amendments herein are added merely to provide additional detail and to clarify the subject matter originally claimed.

**Rejections under 35 U.S.C. § 102(b)**

Claims 29 and 31 stand rejected under 35 U.S.C. § 102(b) as assertedly being "anticipated by Wensvoort *et al.* (WO 92/21375)." (See Office Action of June 1, 2004, at page 2.) At least partially in view of the proposed amendments to claims 29 and 31, applicants respectfully traverse the rejection as set forth herein.

Although applicants do not agree, to expedite prosecution, applicants propose to amend claim 29 to include the additional element: "wherein the positive strand RNA virus's genome comprising SEQ ID NO: 18." Wensvoort, *et al.* contains no such element because it does not teach a sequence of the Porcine Reproductive and Respiratory Syndrome Virus's genome (hereinafter referred to as the "PRRSV") having SEQ ID NO:18. The present application discloses the complete 5' end of the PRRSV genome. (See Specification, at pages 16-17, and pages 22-23). The amendment of claim 29 is fully supported by the as-filed specification and original claim language encompassing the entire full length genome of PRRSV. Claim 31 has been similarly amended to include the additional element: "wherein the positive strand RNA

virus's genome comprises SEQ ID NO: 18." Reconsideration and withdrawal of the anticipation rejections of claims 29 and 31 is respectfully requested.

**Rejections under 35 U.S.C. § 103(a)**

Claims 7, 10, 14-22 and 27-31 stand rejected under 35 U.S.C. § 103(a) (hereinafter referred to as "Section 103") as being unpatentable over Wensvoort, *et al.* in view of Moormann *et al.* (Moormann, *et al.*, Infectious RNA Transcribed from an Engineered Full-Length cDNA Template of the Genome of a Pestivirus, 1996, *J. Virol.*, 70(2):763-770, hereinafter referred to as "Moormann, *et al.*"). Partially in view of the amendments made to independent claims 7, 10, 20, 25 and 29-31, applicants respectfully traverse the rejection as hereinafter set forth.

Applicants respectfully submit that the obviousness rejections of independent claims 7, 10, 20 and 29-31 are improper because the cited references do not teach or suggest all the elements of the recited claims. For instance, independent claims 7, 10, 20, 25 and 29-31 have been amended to recite the additional element: "wherein the positive strand RNA virus's genome comprises SEQ ID NO: 18." Neither cited reference teaches or recites this element because they do not teach or disclose the entire full length sequence of the PRRSV genome. The present application discloses for the first time the complete PRRSV genome. (See, Specification, at pages 16-17, and 22-23). The amendments to the independent claims are fully supported by the as-filed specification and original claim language encompassing the entire full length genome of PRRSV. (*Id.*)

Applicants respectfully request reconsideration the obviousness rejections of independent claims 7, 10, 20, 25 and 28-31, because the cited references do not teach all the elements of the present invention nor do they provide a motivation to combine.

Claims 14-19, 21, 22, and 27 are also not obvious as, *inter alia*, depending from allowable independent claims.

**Rejections under 35 U.S.C. § 112, Second Paragraph**

Claims 5 and 25 stand rejected under 35 U.S.C. § 112, Second Paragraph as assertedly being "indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." (See Office Action of June 1, 2004, at page 6.) At least

partially in view of the proposed amendments to claims 5 and 25, applicants respectfully traverse the rejections as set forth herein.

Specifically, it was thought that “it is not entirely clear how much of the genetic sequence must be deleted in order to meet the instant claim element,” of “lacking genetic information in any of ORF 1a, 1b and 2-7.” (*Id.* at pages 6-7.) Although applicants do not agree, to expedite prosecution, applicants propose to amend claim 5 to read as follows: “An isolated Porcine Reproductive and Respiratory Syndrome virus (PRRSV) comprising a recombinant nucleic acid being an *in vitro*-transcribed RNA of a cDNA copy of a PRRSV genome with a deletion in an ORF selected from any of ORFs 1a, 1b, and 2-7”. As amended, claim 5 is more clearly directed to an isolated PRRSV having a deletion of all or part of one of an ORF.

Similarly, applicants propose amending claim 25 to read as follows: “A DNA comprising nucleic acid comprising: DNA complementary to a Porcine Reproductive and Respiratory Syndrome virus (PRRSV) genome with a deletion in an ORF selected from any of ORFs 1a, 1b, and 2-7.” As amended, claim 25 is more clearly directed to a DNA sequence having a deletion of all or part of one of an ORF.

In view of the amendments made herein to claims 5 and 25, applicants respectfully request reconsideration and withdrawal of the indefiniteness rejections.

#### ENTRY OF AMENDMENTS

The amendments of independent claims 5, 7, 10, 20, 25 and 29-31 should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application. The amendments address all of the concerns raised by the Examiner in the Final Rejection and therefore it is believed the remaining claims are in position for allowance.

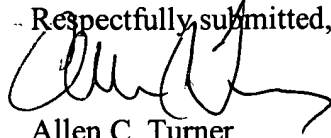
#### CONCLUSION

In view of the forgoing amendments and remarks, applicants respectfully submit that the claims define patentable subject matter. Should the Office determine that additional issues

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remain which might be resolved by a telephone conference, the Office is invited to contact applicants' attorney at the address or telephone number given herein.

Respectfully submitted,



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Date: October 19, 2004